REMARKS

Claims 1, 4-6, 9-13, 18-31, and 34 are pending in the present application.

The Examiner objected to the specification for informalities. Specifically, the Examiner stated that the application as originally filed contained 34 claims, 30 pages of specification and 20 figures (on 14 sheets) according to the transmittal. Further, the Examiner states that two specifications were submitted in August 2001, which appear to be related to the foreign applications cited in the claim for priority. In addition, the application contains six US patents as well as non-patent reference material not listed in form PTO-1449. These additional documents are hereinafter referred to as "the documents in question."

Applicant submits that the Application, as originally filed on April 5, 2001, is the correct application. The documents in question were attached to an assignment submitted on August 16, 2001 in response to a notice to file missing parts.

Claims 1, 4-5, 9-13, 20-31, and 34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sudhakaran, et al. (U.S. Patent Application Number 2003/0014468 A1) (hereinafter 'Sudhakaran') in view of Cepulis (U.S. Patent Number 6,397,268). Applicant respectfully traverses this rejection.

Claims 6, and 18-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sudhakaran in view of Cepulis, and in further view of Macon, Jr., et al. (U.S. patent number 5,752,249) (hereinafter "Macon, Jr."). Applicant respectfully traverses this rejection.

Applicant's claim 1 recites

> "A method of automatic configuration of a unit forming a component of an apparatus, the method comprising:
>
> a) accessing class information held in the unit on insertion of the unit into the apparatus prior to integrating the unit

functionally in the apparatus, said class information representing an object class for the unit;

b) using the **accessed class information** to reference, in storage in the apparatus separate from the unit, object definitions for the class of unit, which object definitions include initialization code operable on receipt of the accessed class information to produce configuration information operable to produce object configuration statements for the unit, that comprise at least one of the following: the object class for the unit; an object instance number; an attribute name; and a value for the attribute; and

c) verifying the validity of the configuration information and, when the configuration information is valid, storing the configuration information in a configuration file for the apparatus including a location of the unit in the apparatus to enable functional integration of the unit in the apparatus." (Emphasis added)

The Examiner has acknowledged that Sudhakaran **does not teach** object definitions which include initialization code operable on receipt of the accessed class information to produce configuration information operable to produce object configuration statements for the unit, that comprise at least one of the following: the object class for the unit; an object instance number; an attribute name; and a value for the attribute..." The Examiner also acknowledged that Sudhakaran **does not teach** verifying "the validity of the configuration information and, when the configuration information is valid, store the configuration information in a configuration file for the apparatus including a location of the unit in the apparatus to enable functional integration of the unit in the apparatus." The Examiner has however, asserted that Cepulis teaches these features. The Applicant respectfully disagrees with the Examiner's assertions and his characterization of Cepulis.

Specifically, Cepulis is directed toward tracking PCI bus numbers that change during re-configuration, wherein at col. 2, lines 48-64 Cepulis discloses

> "However, situations arise more and more often which require rerunning the system configuration utility to update the device configuration information stored in the NVRAM when a new device is added to the computer system. One specific situation is when a PCI peripheral device interface card having a PCI-PCI

bridge is placed into a PCI connector slot of a first PCI bus of the computer system. The PCI-PCI bridge, which creates a new PCI bus, causes the PCI bus numbers of all subsequent PCI buses to increase by one (PCI-PCI bridge may be a PCI interface card having its own PCI bus for a plurality of PCI devices integrated on the card or for PCI bus connector slots associated with the new PCI bus). This creates a problem since any user configured information such as interrupt request (IRQ) number, controller order number, etc., stored in the NVRAM specifies the bus and device/function number of the PCI device to which it applies." (Emphasis added)

Cepulis also discloses at col. 4, lines 21-34

"Each PCI card comprises at least one PCI device that is unique in the computer system. Each PCI device has a plurality of registers containing unique criteria such as Vender ID, Device ID, Revision ID, Class Code Header Type, etc. Other registers within each PCI device may be read from and written to so as to further coordinate operation of the PCI devices in the computer system. During system configuration,, each PCI device is discovered and its personality information such as interrupt request number, bus master priority, latency time and the like are stored in the system non-volatile random access memory (NVRAM) using, for example, the ESCD format." (Emphasis added)

Further Cepulis discloses at col. 6, lines 8-15

"In the present invention, the PCI bus number, PCI device number and PCI physical slot number are found in both the ESCD freeform information structure ECD_PCIBRDID and IRQ routing table. During computer system startup, the PCI bus number in the IRQ routing table is updated for each PCI device. The ESCD freeform information structure ECD_PCIBRDID stored in the NVRAM, typically, is not updated during system startup." (Emphasis added)

From the foregoing, it appears that Cepulis teaches detecting when a PCI device bus number has changed and updating the storages accessed by auto-configuration BIOS. However, Cepulis **does not**, as the Examiner has suggested, teach or suggest "using the **accessed class information** to reference ... object definitions for the class of unit, which object definitions include initialization code operable on receipt of the accessed class information to produce configuration information operable to produce object configuration statements for the unit, that comprise at least one of the following: the object

class for the unit; an object instance number; an attribute name; and a value for the attribute;" as recited in Applicant's claim 1 (Emphasis added)

The Class Code Header Type referenced by Cepulis is a required field in the PCI header which identifies the generic function of the device. However, Cepulis is silent on the use of this Class information and after col. 4, never mentions class again. More particularly, Cepulis uses information such as the PCI bus number, PCI device number and PCI physical slot number, **not** the class information.

In addition, Cepulis is completely silent on verifying "the validity of the configuration information." Accordingly, Cepulis **does not teach or suggest** "the validity of the configuration information and, when the configuration information is valid, store the configuration information in a configuration file for the apparatus including a location of the unit in the apparatus to enable functional integration of the unit in the apparatus" as recited in Applicant's claim 1.

Accordingly, even if (*arguendo*) one were to combine the references as the Examiner has suggested, one would not arrive at the subject matter recited in claim 1.

Furthermore, the above notwithstanding, the Applicant asserts that there is no motivation to combine the references in the manner in which the Examiner has suggested. According to MPEP §2143.01, "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)..." The Applicant cannot find any such suggestion or motivation.

More particularly, the Examiner cites the suggestion as "a more robust and complete plug and play implementation of the computer system" being found at col. 6, lines 49-51. The Applicant respectfully asserts that this quote is taken out of context. Cepulis discloses at col. 6, lines 41-51 "Another feature of the present invention is that **any bus number changes** found during POST of the contents of the IRQ routing table

and ECD_PCIBRDID **may be corrected by overwriting the RAM locations containing the incorrect bus numbers** for the affected PCI devices. The computer system can then utilize the corrected bus numbers in the system RAM to perform the necessary steps for startup and proper operation of the computer system. **This feature makes for** a more robust and complete plug and play implementation of the computer system." Since the feature disclosed in Cepulis is not one of the features recited in Applicant's claim 1, Applicant submits that the Examiner's asserted suggestion for motivation is erroneous.

Macon, Jr. (first paragraph of summary) describes "a way of allowing one or more instantiated parameterized collection classes to survive the termination or loss of a routine that instantiated them". Macon, Jr. **does not teach or suggest** "object definitions include initialization code operable on receipt of the accessed class information to produce configuration information operable to produce object configuration statements for the unit, that comprise at least one of the following: the object class for the unit; an object instance number; an attribute name; and a value for the attribute".

Thus, neither Sudhakaran, Cepulis, nor Macon, Jr., taken either singly or in combination, teach or suggest the combination of features recited in Applicant's claim 1.

For the foregoing reasons, Applicant submits that claim 1, along with its dependent claims, patentably distinguishes over Sudhakaran in view of Cepulis, and over Sudhakaran in view of Cepulis, and in further view of Macon, Jr.

Claims 13, 28 and 31 recite features that are similar to the features recited in Applicant's claim 1. Accordingly, Applicant believes that claims 13, 28 and 31, along with their respective dependent claims, patentably distinguish over Sudhakaran in view of Cepulis, and over Sudhakaran in view of Cepulis, and in further view of Macon, Jr. for at least the reasons given above.

CONCLUSION

Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5181-86600/BNK.

Respectfully submitted,

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